

What is claimed is:

- 1.** A method for policy-based test management, the method comprising the steps of:

 - i) defining at least one high-level test policy for test management, the test policy comprising one or more testing actions to be executed when one or more pre-defined conditions are met;
 - 5 ii) based on the high-level test policy, creating one or more test scripts associated to the testing actions of the test policy, the test scripts being set to be executed when the one or more pre-defined conditions are met;
 - iii) detecting when the one or more pre-defined conditions are met; and
 - 10 iv) executing the one or more test scripts.
- 2.** The method claimed in claim 1, wherein the steps i) and ii) are performed by a test management functionality.
- 3.** The method claimed in claim 1 further comprising, prior to step i), the step of:

defining high-level test goals;
wherein the at least one high-level test policy for test management is

5 defined according to the test goals.
- 4.** The method claimed in claim 1, wherein the at least one high-level test policy is vendor-independent.

5. The method claimed in claim 1, wherein the at least one high-level test policy is technology-independent.
6. The method claimed in claim 1, further comprising between steps iii) and iv) the step of:
- v) using the high-level test policy to deduct which test scripts are to be executed based on the detected pre-defined conditions.
7. The method claimed in claim 1, wherein the at least one high-level test policy comprises an expression of the form IF(condition)THEN(action), wherein a condition parameter is related to the one or more pre-defined conditions, and an action parameter is related to the one or more test scripts.
8. The method claimed in claim 6, wherein steps iii) and v) are performed in a test server, and wherein the method further comprises the step of:
- transmitting the one or more test scripts to be executed from the test server to a network element acting as a Policy Enforcement Point (PEP), wherein step 5 iv) is performed by the network element.

9. The method claimed in claim 6, wherein steps iii) and v) are performed in an Element Manager / Network Manager (EM/NM) acting as a Policy Decision Point (PDP), and wherein the method further comprises the step of:

transmitting the high-level test policy along with the one or more test
5 scripts associated to the test policy from a test server to the EM/NM, wherein the
EM/NM forwards the one or more test scripts to a network element connected to
the EM/NM.

10. The method claimed in claim 6, wherein steps iii), iv) and v) are performed in a network element of a managed network, and wherein the method further comprises the step of:

transmitting the high-level test policy along with the one or more test
5 scripts associated to the test policy from a test server to the network element.

11. The method claimed in claim 10, wherein the network element stores the high-level test policy along with the one or more test scripts associated to the test policy in a Policy Information Base (PIB).

12. The method claimed in claim 9, wherein the protocol used for performing the step of transmitting the high-level test policy along with the one or more test scripts associated to the test policy from a test server to the EM/NM is the Common Open Policy Service extensions for PRovisioning (COPS-PR) protocol.

13. A policy-based test management system comprising:
- a test management functionality defining at least one high-level test policy for test management comprising one or more testing actions to be executed when one or more pre-defined conditions are met, wherein the test management functionality is used to create one or more test scripts associated to the testing actions and based on the high-level test policy, the test scripts being set to be executed when the one or more pre-defined conditions are met; and
- 5 a Policy Decision Point (PDP) connected to the test management functionality and detecting when the one or more pre-defined conditions are met.
14. The policy-based test management system claimed in claim 13, wherein the test management functionality is first used for defining high-level test goals, and the test policy for test management is defined according to the test goals.
15. The policy-based test management system claimed in claim 13, wherein the at least one high-level test policy is vendor-independent.
16. The policy-based test management system claimed in claim 13, wherein the at least one high-level test policy is technology-independent.
17. The policy-based test management system claimed in claim 13, wherein the PDP uses the high-level test policy to deduct which test scripts are to be executed based on the detected pre-defined conditions.

18. The policy-based test management system claimed in claim 13, wherein the at least one high-level test policy comprises an expression of the form IF(condition)THEN(action), wherein a condition parameter is related to the one or more pre-defined conditions, and an action parameter is related to the one or more
5 test scripts.

19. The policy-based test management system claimed in claim 18, wherein:
the PDP is connected to the test management functionality and receives from the test management functionality the test policy along with the associated test scripts, wherein when the one or more pre-defined conditions are met, the
5 PEP deducts from the test policy which test scripts are to be executed and triggers an execution of the test scripts.

20. The policy-based test management system claimed in claim 19, further comprising:
a network element of a managed network connected to the PDP, wherein the PDP transmits to the network element the test scripts to be executed by the
5 network element.

21. The policy-based test management system claimed in claim 19, wherein the PDP is a test server comprising a memory for storing the test policies along with the associated test scripts.

22. The policy-based test management system claimed in claim 19, wherein the PDP is an Element Manager / Network Manager (EM/NM) connected to a network element of a managed network and comprising a Policy Information Base (PIB) for storing the test policies along with the associated test scripts.

23. The policy-based test management system claimed in claim 19, wherein the PDP is a network element of a managed network and comprising a Policy Information Base (PIB) for storing the test policy along with the associated test scripts.

24. A Policy Decision Point (PDP) comprising:

a Policy Information Base (PIB) storing:

i) at least one high-level test policy for test management, the test policy comprising one or more testing actions to be executed when one or more pre-defined conditions are met;

ii) one or more test scripts associated with the testing actions of the test policy, the test scripts being set to be executed when the one or more pre-defined conditions are met;

an engine detecting when the one or more pre-defined conditions are met,
5 and if so, triggering an execution of the test scripts.

10 25. The PDP claimed in claim 24, wherein the PIB is provisioned with the test policy and the test scripts from a test management functionality.

26. The PDP claimed in claim 24, wherein the PDP is a test server and the engine is a rule-based engine.

27. The PDP claimed in claim 24, wherein PDP is an Element Manager / Network Manager (EM/NM) and the engine is a fault manager.

28. The PDP claimed in claim 24, wherein when the one or more pre-defined conditions are met, the PDP sends the one or more test scripts to a network element a managed network, which in turn executes the one or more test scripts.

29. The PDP claimed in claim 24, wherein when the one or more pre-defined conditions are met, the PDP acts also as a Policy Enforcement Point and executes the one or more test scripts.